

**Notice of Allowability**

Application No.

10/625,970

Examiner

Dalzid Singh

Applicant(s)

MCGUIRE, JAMES P.

Art Unit

2633

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 23 July 2003.
2. ☒ The allowed claim(s) is/are 1-25 which have been renumbered as 1-25 respectively.
3. ☒ The drawings filed on 23 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 01/02/04;03/15/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
LESLIE PASCAL  
PRIMARY EXAMINER

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 1-25 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Claims 1-7 are allowed because the prior art of record (US Patent No. 6,289,145) to Solgaard et al does not teach or fairly suggest reconfigurable optical add/drop multiplexer comprising:

a first plurality of transmissive beam directors in a beam director array optically between the first wavelength separating medium and a first plurality of beam reflectors in a beam reflector array;

the first plurality of beam reflectors in the beam reflector array comprised of at least one beam reflector positionable to reflect at least some of the angularly diffracted light;

an anamorphic relay lens positioned to focus the plurality of angularly diffracted light signals;

a second plurality of transmissive beam directors in a beam director array optically between the second wavelength separating medium and a second plurality of beam reflectors in a beam reflector array; and,

the plurality of second beam reflectors in the beam reflector array comprised of at least one beam reflector positionable to reflect at least some of the angularly diffracted light.

Claims 8-15 are allowed because the prior art of record (US Patent No. 6,,289,145) to Solgaard et al does not teach or fairly suggest reconfigurable optical add/drop multiplexer comprising:

- a first plurality of transmissive beam directors in a beam director array optically between the first wavelength separating medium and a first plurality of beam reflectors in a beam reflector array;

- the first plurality of beam reflectors in the beam reflector array comprised of at least one beam reflector positionable to reflect at least some of the angularly diffracted light;

- a relay lens positioned to focus the plurality of angularly diffracted light signals;

- a second plurality of transmissive beam directors in a beam director array optically between the second wavelength separating medium and a second plurality of beam reflectors in a beam reflector array; and,

- the plurality of second beam reflectors in the beam reflector array comprised of at least one beam reflector positionable to reflect at least some of the angularly diffracted light.

Claims 16-22 are allowed because the prior art of record (US Patent No. 6,,289,145) to Solgaard et al does not teach or fairly suggest reconfigurable optical add/drop multiplexer comprising:

- a first plurality of transmissive beam directors in a beam director array optically between the first wavelength separating medium and a first plurality of beam reflectors in a beam reflector array;

the first plurality of beam reflectors in the beam reflector array comprised of at least one beam reflector positionable to reflect at least some of the angularly diffracted light;

a second plurality of transmissive beam directors in a beam director array optically between the second wavelength separating medium and a second plurality of beam reflectors in a beam reflector array; and,

the plurality of second beam reflectors in the beam reflector array comprised of at least one beam reflector positionable to reflect at least some of the angularly diffracted light.

Claim 23 is allowed because the prior art of record (US Patent No. 6,,289,145) to Solgaard et al does not teach or fairly suggest reconfigurable optical add/drop multiplexer comprising step of:

focusing at least some of the angularly diffracted light through at least one of a first plurality of transmissive beam directors in a beam director array and near a first plurality of beam reflectors in a beam reflector array using a third lens;

focusing at least some of the angularly diffracted light through at least one of a second plurality of transmissive beam directors in a beam director array and near a second plurality of beam reflectors in a beam reflector array using an anamorphic relay lens; and,

directing at least some of the angularly diffracted light using at least one of the first plurality of beam directors and at least one of the second plurality of beam directors.

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Claim 24 is allowed because the prior art of record (US Patent No. 6,,289,145) to Solgaard et al does not teach or fairly suggest reconfigurable optical add/drop multiplexer comprising step of:

focusing at least some of the angularly diffracted light through at least one of a first plurality of transmissive beam directors in a beam director array and near a first plurality of beam reflectors in a beam reflector array using a second lens;

focusing at least some of the angularly diffracted light through at least one of a second plurality of transmissive beam directors in a beam director array and near a second plurality of beam reflectors in a beam reflector array using a relay lens; and,

directing at least some of the angularly diffracted light using at least one of the first plurality of beam directors and at least one of the second plurality of beam directors.

Claim 25 is allowed because the prior art of record (US Patent No. 6,,289,145) to Solgaard et al does not teach or fairly suggest reconfigurable optical add/drop multiplexer comprising step of:

focusing at least some of the angularly diffracted light through at least one of a first plurality of transmissive beam directors in a beam director array, near a first plurality of beam reflectors in a beam reflector array using a second lens, through at least one of a second plurality of transmissive beam directors in a beam director array, and near a second plurality of beam reflectors in a beam reflector array using a second lens and directing at least some of the angularly diffracted light using at least one of the

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first plurality of beam directors and at least one of the second plurality of beam directors.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kessler et al (US Patent No. 6,434,291) is cited to show MEMS-based optical bench.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272--3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DS

March 14, 2005

*Heather Pascal*  
HEATHER PASCAL  
SENIOR EXAMINER